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A New Species of *Phymatocarpus* (Myrtaceae) from Southwestern Australia

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Abstract

Phymatocarpus interioris Craven is described newly. A key to the three species of *Phymatocarpus* is provided and their distributions are mapped.

Introduction

The Western Australian genus *Phymatocarpus* F. Muell. was established in 1862 with *P. porphyrocephalus* F. Muell. its sole, and hence type, species. Mueller added a second species, *P. maxwellii* F. Muell. in 1875. Both of these species have a more or less coastal distribution, the former in the Murchison River-Eneabba region and the latter from Mount Barker east to Israelite Bay. During preparation of an account of the genus for *Flora of Australia* it was noted that several populations, seemingly of *P. maxwelli*, occurred in the Lake King-Peak Charles area to the north of the range of *P. maxwelli*. Further investigation showed that these populations represent an undescribed species of the genus; this is described below as *P. interioris*.

Taxonomy

1. *Phymatocarpus porphyrocephalus* F.Muell., *Fragm.* 3: 121 (1862). *Typus*: Western Australia, sand plain S of Murchison River, *Oldfield s.n.* (holotypus MEL *1059023*).

2. *Phymatocarpus maxwellii* F.Muell., *Fragm.* 9: 45 (1875), as *maxwelli*. *Typus*: Western Australia, near Cape Arid, 1875, *Maxwell s.n.* (holotypus MEL *1059015*).

Regelia sparsifolia W.Fitzg., *J. Bot.* 50: 21 (1912). *Typus*: Western Australia, Esperance Bay, Oct. 1903, *Daw s.n.* (holotypus NSW; isotypus MEL fragm.).

3. *Phymatocarpus interioris* Craven, *sp. nov.*

A *P. maxwellii* F. Muell. staminibus non distincte fasciculatis et annulo staminali et a *P. porphyrocephalo* F. Muell. staminibus paucioribus (23–30), floribus ebracteolatis et lamina foliorum venis numerosioribus (5–9) differt.

Typus: Western Australia, c. 65 km W of Daniell, 15 Sep 1964, *Kuchel 1798* (holotypus AD; isotypus CANB).

Shrub to 1.5 m tall. *Leaves* 4.4–9.2 mm long, 3–7.5 mm wide, short-petiolate or subsessile; blade glabrous or hairy, very broadly ovate to circular to transversely broadly elliptic, in transverse section sublunate, the veins 5–9 and parallel-pinnate. *Inflorescence* with 2–6 triads; bracteoles absent. *Hypanthium* sericeous. *Sepals* costate or not, very broadly triangular or elliptic, 0.7–0.8 mm long. *Staminal ring* well developed, 1.4–2.8 mm long. *Stamens* 23–30 per flower, often in distinct antepetalous clusters (the bundle claw *per se* weakly developed), the filaments glabrous, mauve, purple or pink, 3.3–5.5 mm long. *Style* 7–8 mm long. *Ovules* 5–10 per locule. *Fruit* 2.7–3.9 mm long with the distal rim flat or more or less so. *Seed* generally obovoid; cotyledons obvolute.

Selected specimens examined (c. 12 seen): WESTERN AUSTRALIA: 93.2 km from Lake King Post Office along the Norseman road, 5 Nov 1994, *Craven, Lepschi & Holliday 9599* (A, ASU, CANB,

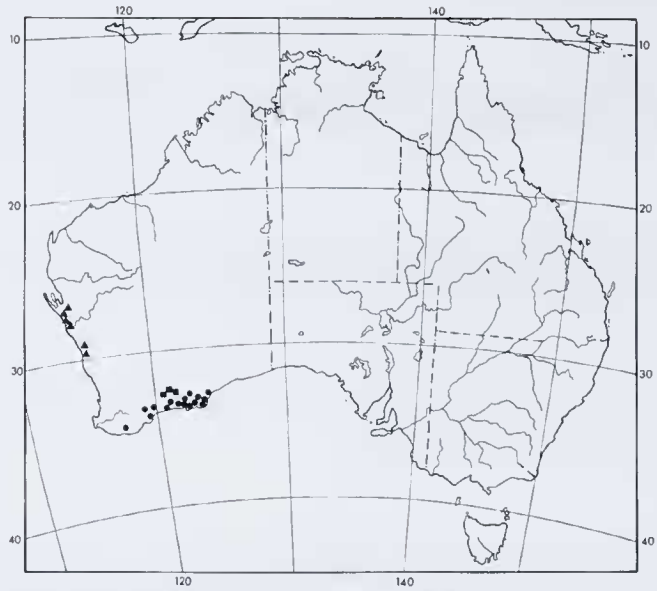

Fig. 1. Distributions of the species of *Phymatocarpus*. ■ *P. interioris* ● *P. maxwellii* ▲ *P. porphyrocephalus*

E. L. MEL. NSW. P. PERTH); 2.6 km N of Peak Eleanora, 3.8 km E of Fields Road on Peak Charles Road, 2 Oct 1983, *Burgman & McNee 2605* (PERTH); 22 km W of 90-Mile Tank on the Daniell-Lake King road, 10 Oct 1973, *Demarz 4649* (PERTH); 54 km W of Kumarl which is c. 122 km N of Esperance, 10 Oct 1966, *Wilson 5697* (PERTH).

Notes: Phymatocarpus interioris occurs in southern Western Australia in the Lake King-Peak Charles area (Fig. 1). It grows in mallee and eucalypt woodland, shrubland and low heathland, apparently preferring well-drained sandy soil that often overlies clay. Flowers have been recorded between September and November.

Specimens that are assigned now to *P. interioris* previously were often identified as *P. maxwellii*, perhaps because of the similar leaf colour and, for the narrower-leaved plants, similar leaf blade shape. The well developed staminal ring, however, clearly distinguishes *P. interioris* from *P. maxwellii* and is a feature possessed in common with *P. porphyrocephalus* from which it differs as given in the key below.

Key to the species of *Phymatocarpus*

1. Stamens distinctly 5-bundled, staminal ring absent.....*P. maxwellii*
1. Stamens not distinctly 5-bundled (although often aggregated into clusters opposite the petals and then with weakly developed bundle claws), staminal ring well-developed (1.4–3 mm long).

    2. Stamens 46–71 per flower; flowers bracteolate; leaf blade broadly elliptic, elliptic, obovate, angular-obovate or subcircular, the venation parallel-pinnate with 1–3 veins .....*P. porphyrocephalus*
    2. Stamens 23–30 per flower; flowers ebracteolate; leaf blade very broadly ovate, broadly ovate, circular or transversely broadly elliptic, the venation parallel-pinnate with 5–9 veins .....*P. interioris*

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